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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,108	10/05/2005	Hans-Kervin Bruins	GIL-16108	3576
7609 7590 11/10/2009 RANKIN, HILL & CLARK LLP 23755 Lorain Road - Suite 200 North Olmsted, OH 44070-2224			EXAMINER SOROUSH, ALI	
			ART UNIT 1616	PAPER NUMBER
			MAIL DATE 11/10/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/535,108	Applicant(s) BRUINS ET AL.	
	Examiner ALI SOROUGH	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 28-40 and 43-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28-40 and 43-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgement of Receipt

Applicant's response filed on 08/07/2009 to the Office Action mailed on 03/17/2009 is acknowledged.

Status of the Claims

Claims 28, 30, and 40 currently amended and claims 1-27, 41, 42, and 46-52 are cancelled.

Rejections and/or objections not reiterated from the previous Office Action are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set of rejections and/or objections presently being applied to the instant application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Applicant Claims
2. Determining the scope and contents of the prior art.
3. Ascertaining the differences between the prior art and the claims at issue; and resolving the level of ordinary skill in the pertinent art.

Art Unit: 1616

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. The rejection of claims 28, 29, 31-33, 36-41, and 43-45 under 35 U.S.C. 103(a) as being unpatentable over Uick (US Patent 5716602 Published 02/10/1998) in view of Abivardi (Iranian Entomology an Introduction – Applied Entomology Volumn 2, Published 2001) as evidenced by Bledock et al. (US Patent 5648398, Published 07/15/1997) **is maintained.**

Applicant Claims

Applicant claims a method of repelling arthropods comprising applying to a product, area, and or surface a repellent composition comprising at least one portion of the plant Vitex agnus-castus.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

Uick teach an insect repellent sunscreen comprising DEET, octyl methoxycinnamate, fragrance, emulsifiers, and water which can be applied onto human skin and then rubbed on and spread out over the skin for protection outdoors against annoyance by pests and the harmful effects of UV rays. (See title, column 1, Lines 11-19, column 5, Table of example compositions, and column 6, Lines 51-54).

Ascertainment of the Difference Between Scope the Prior Art and the Claims (MPEP §2141.012)

Uick. lacks a teaching wherein the repellent composition comprises a portion or extract of the plant Vitex agnus-castus. This deficiency is cured by the teachings of Abivardi.

Abivardi teach a composition of pine seed with leaves of Vitex agnus castus that can be cooked in olive oil and rubbed onto the entire body as a repellent against insects

Art Unit: 1616

and other injurious animals. (See page 488, Lines 1-19). Furthermore, Abivardi teach that the leaves of *Vitex agnus castus* can be scattered in the house including on the floors in order to repel insects or vermin by their smoke and/or odor. (See page 489, Lines 11-21 and page 523, Lines 16-19).

Bledcok et al teach insect repellent lotions and sprays comprising DEET is effective against Lyme disease ticks. (See title and column 1, Lines 20-53).

***Finding of Prima Facie Obviousness Rational and Motivation
(MPEP §2142-2143)***

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to add the leaves of *Vitex agnus-castus* as an insect repellent to the composition of Uick, as suggested by Abivardi and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because Abivardi teaches that the leaves of *Vitex agnus castus* act as an insect repellent. Therefore, it would have been obvious to one of ordinary skill in the art to use the leaves of *Vitex agnus-castus* as an insect repellent to be added to the composition taught by Uick in order to enhance the insect repellency activity of the composition.

It is the Examiners position that a composition comprising DEET would necessarily act as a repellent against ticks. This is substantiated by the teachings of Bledock et al.

In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Response to Arguments

Applicant argues that Abivardi teach that leaves of *Vitex agnus castus* is used as a repellent against insects such as mosquitoes and therefore would not be obvious to use on arachnids such as ticks and mites. Applicant's argument has been fully considered but found not to be persuasive. It is the Examiners position that a composition comprising leaves of *Vitex agnus castus* applied to the skin would intrinsically act as repellent of ticks and mites as well as insects. Furthermore, it should be noted that Abivardi teach that leaves of *Vitex agnus castus* is repellent of insects as well as other injurious animals. The Examiner reads the teaching of other injurious animals as making obvious the use as a repellent of ticks and mites. It should be noted that the Examiner has relied on the combination teaching of Uick and Abivardi to teach that the combination as a whole is a repellent against ticks. Finally, with regard to claims 43-45 the claims are directed to a composition and its action as a repellent against ticks and mites is an intended use and not given patentable weight. For the foregoing reasons, the instant rejection of claims 28, 29, 31-33, 36-41, and 43-45 under 35 U.S.C. 103(a) is maintained.

2. The rejection of claims 30, 34 and 35 under 35 U.S.C. 103(a) as being unpatentable over Uick (US Patent 5716602 Published 02/10/1998) in view of Abivardi (Iranian Entomology an Introduction – Applied Entomology Volume 2, Published 2001) further in view of Blum et al. (US Patent 5885600, Published 03/23/1999) as evidenced by Bledock et al. (US Patent 5648398, Published 07/15/1997) **is maintained.**

Applicant Claims

Applicant claims a method of repelling arthropods comprising applying to a product, area, and or surface a repellent composition comprising at least one portion of the plant *Vitex agnus-castus*.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

The combined teachings of Uick and Abivardi is disclosed above.

Ascertainment of the Difference Between Scope the Prior Art and the Claims (MPEP §2141.012)

Uick. and Abivardi lack a teaching wherein the repellent composition comprises a antioxidant. This deficiency is cured by the teachings of Blum et al.

Blum et al. teach, "Insect repellents have been used for centuries to prevent insects from annoying humans and animals alike. Repellents have also been used to prevent insect harm to such items as food, clothing, and furniture." (See column 1, Lines 15-19). "A composition that has insect repellent properties is made from cold processed extracted oils and an antioxidant ..." (See abstract). The composition may further comprises a solvent, UV absorber or stabilizer, and antioxidants (such as butylated hydroxytoluene and ascorbyl palmitate). (See columns 7-8, claims 1-17). "The resultant composition may then be formulated into many different items, such as lotions, sprays,

Art Unit: 1616

and creams for use on humans, animals and vegetation.” (See column 2, Lines 49-51).

“The various compositions work effectively against arachnids (spiders, ticks, mites), caterpillars, cockroaches, silver fish, moths, slugs, bees, yellow jackets, beetles, aphid, meals bugs, green flies, horse flies, gnats, mosquitoes, and chiggers.” (See column 6, Lines 19-23).

***Finding of Prima Facie Obviousness Rational and Motivation
(MPEP §2142-2143)***

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to add antioxidants to the composition of Uick , as suggested by Blum et al. and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because Blum et al. teach that insect repellent compositions can comprise antioxidants. Therefore, it would have been obvious to one of ordinary skill in the art to use the antioxidants butylated hydroxytoluene and ascorbyl palmitate to be added to the composition taught by Uick in order to add antioxidant functionality to the composition.

In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of

Art Unit: 1616

ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Response to Arguments

Applicant argues that combination of Blum et al. with Uick and Abivardi does not cure the deficiency of a teaching of Vitex agnus castus as a repellent of ticks and mites. Applicant's argument has been fully considered but found not to be persuasive. The Examiner has primarily relied on Blum et al. to show that antioxidants can be added repellent compositions. Furthermore, the Examiner has relied on Blum et al. to show that one of ordinary skill in the art of insect repellents would expect that compositions useful against mosquitoes can also be effective against arachnids such as ticks and mites. For the foregoing reasons, the instant rejection of claims 30, 34 and 35 under 35 U.S.C. 103(a) is maintained.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 1616

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Soroush whose telephone number is (571) 272-9925. The examiner can normally be reached on Monday through Thursday 8:30am to 5:00pm E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Johann Richter can be reached on (571) 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ali Soroush
Patent Examiner
Art Unit: 1616

/Ernst V Arnold/

Primary Examiner, Art Unit 1616